

REMARKS

Claims 1, 14, and 16 have been amended to more clearly recite Applicants' invention. Support for the amendments to claims 1, 14, and 16 may be found throughout the specification and figures. No new matter has been added. Upon entry of this amendment, claims 1-16 are pending.

In the Office Action dated March 4, 2005, claims 1-10, 12-14, and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Williams (U.S. Patent No. 6,353,271) in view of Getchel et al. (U.S. Patent No. 6,019,164). Applicants respectfully traverse this rejection.

Independent claim 1, as amended, recites a lithographic apparatus that includes, *inter alia*, a chuck and a frame that supports the chuck with respect to other parts of the lithographic apparatus, the chuck being thermally isolated from at least the frame, wherein the chuck and the frame are separated and spaced from each other. The combination of Williams and Getchel et al. does not disclose or suggest all of the features of claim 1.

Williams discloses wafer and reticle stages for EUV scanning lithography. (Williams at col. 4, lns. 20-21.) As conceded by the Examiner, Williams does not expressly disclose a chuck being thermally isolated from a frame. (Office Action at p. 2.) Getchel et al. discloses various embodiments of a chuck for holding flat workpieces. (See Getchel et al. at col. 1, lns. 11-14.) None of the embodiments of Getchel et al. disclose or suggest a chuck and a frame that are separated and spaced from one another. The chuck assembly (10) of Getchel et al. includes a lower assembly (30) that is mountable to a base (48). (Getchel et al. at Abstract, col. 10, lns. 21-37, FIG. 3.) None of the embodiments disclosed by Getchel et al. teach or suggest a chuck and a frame that are separated and spaced from one another, as recited by claim 1.

Accordingly, Applicants respectfully submit that claim 1 and claims 2-13 that depend therefrom are patentable over Williams in view of Getchel et al., and respectfully request that the rejection to claims 1, 2, and 4-13 be withdrawn.

Independent claim 14 recites a method of manufacturing a device that includes, *inter alia*, supporting the chuck with respect to other parts of the lithographic apparatus with a frame, and thermally isolating the chuck from the frame, wherein the chuck and the frame are separated and spaced from each other. The combination of Williams and Getchel et al. does not disclose or suggest all of the features of claim 14.

Williams and Getchel et al. are discussed above. None of the embodiments of Getchel et al. disclose or suggest a chuck and a frame that are separated and spaced from one another, as recited by claim 14.

Accordingly, Applicants respectfully submit that claim 14 is patentable over Williams in view of Getchel et al. and respectfully request that the rejection to claim 14 be withdrawn.

Independent claim 16 recites a lithographic apparatus that includes, *inter alia*, means for thermally isolating one of the means for forming the patterned beam and the substrate from other parts of the lithographic apparatus, wherein the means for thermally isolating one of the means for forming the patterned beam and the substrate from other parts of the lithographic apparatus includes separating the one of the means for forming the patterned beam and the substrate from other parts of the lithographic apparatus. The combination of Williams and Getchel et al. does not disclose or suggest all of the features of claim 16.

Williams and Getchel et al. are discussed above. None of the embodiments of Getchel et al. disclose or suggest means for thermally isolating one of the means for forming the patterned beam and the substrate from other parts of the lithographic apparatus, wherein the means for thermally isolating one of the means for forming the patterned beam and the substrate from other parts of the lithographic apparatus includes separating the one of the means for forming the patterned beam and the substrate from other parts of the lithographic apparatus, as recited by claim 16.

Accordingly, Applicants respectfully submit that claim 16 is patentable over Williams in view of Getchel et al. and respectfully request that the rejection to claim 16 be withdrawn.

In the Office Action, claim 15 was rejected as being anticipated by Orihira et al. (U.S. Patent No. 5,685,363). Applicants respectfully traverse this rejection.

Claim 15 recites a chuck for use in a lithographic device that includes a first side having a support surface constructed to support an object, a second side having a low emissivity coating to thermally isolate the chuck, an enclosed chamber positioned within the chuck, and a phase transiting material positioned within the enclosed chamber. Orihira et al. does not disclose or suggest all of the features of claim 15.

Orihira et al. discloses a substrate holding device that includes a base (4) that supports a substrate (2). (Orihira et al. at col. 3, lns. 6-8.) Rubber elastic material (22) is disposed on a sheet (12), and the substrate (2) is mounted to the base (4) with the rubber elastic material (22) and sheet (12) placed in between the substrate (2) and the base (4). (Orihira et al. at col. 3, lns. 6-9.) Thus, the sheet (12) is supported by the same side of the base (4) that supports

the substrate (2). Ohiria et al. does not disclose or suggest a chuck with a second side having a low emissivity coating to thermally isolate the chuck, as recited by claim 15. Moreover, Orihira et al. does not disclose or suggest a phase transiting material, as recited by claim 15. Orihira et al. only discloses a heat absorbing material (18) that is contained within a bladder (36). (Orihira et al. at col. 8, lns. 49-65.) Accordingly, Applicants respectfully submit that claim 15 is patentable over Orihira et al. and respectfully request that the rejection to claim 15 be withdrawn.

Applicants acknowledge with appreciation that claim 11 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. However, in view of this Amendment and remarks presented above, Applicants respectfully submit that all of the pending claims are allowable.

All rejections and objections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited. If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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